

4. HOW DO I PREPARE MY HAZARDOUS WASTES AND MATERIALS FOR TRANSPORT?

If you generate hazardous waste and/or other hazardous materials (see box), when you ship them off site for disposal, treatment, or recycling, you will have to follow specific requirements to prepare these materials for shipment. The goal of this chapter is to provide a basic understanding of your responsibilities for preparing your hazardous materials for shipping. It is organized to answer the following questions:

- What transportation regulations apply to my shipment(s) of hazardous materials?
- How do I comply with the transportation regulations?

This chapter is not a description of all shipping and transportation requirements because the requirements will depend on the material/waste you ship or transport, and your State may have additional or more stringent requirements. For specific requirements on the material or waste, consult either the U.S. Department of Transportation (DOT) Hazardous Materials Information hotline (see box) or other appropriate contacts. In most cases, states do not have additional requirements pertaining to the preparation of hazardous material for shipment, but they may have additional requirements governing the transportation of those materials.

DEFINITIONS – HAZARDOUS MATERIAL

The DOT definition of hazardous material is a substance or material...capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated. The term includes hazardous substances as defined in CERCLA/EPCRA (see Chapter 6), hazardous wastes as defined in RCRA (see Chapter 4), marine pollutants, and elevated temperature materials. PCB waste (as defined in TSCA - see Chapter 2) falls within the definition of hazardous substances (and thus, hazardous materials) under DOT regulations.

USEFUL TIP

If you are authorized to transport hazardous waste, there are additional requirements you must comply with, that are not addressed in this document.

RESOURCES

This chapter contains technical and regulatory language. If you have any questions, please call your statewide association, cooperative lawyer, state environmental agency (see resources section), DOT's Hazardous Materials Information hotline at 1-800-467-4922, or EPA's RCRA hotline at 1-800-424-9346.

4.1 WHAT TRANSPORTATION REGULATIONS APPLY TO MY SHIPMENT?

DOT regulations that apply to shipping hazardous materials.

The major law dealing with shipping and transportation of hazardous materials is the Hazardous Materials Transportation Act (HMTA) originally passed in 1974. The HMTA was amended in 1990. These amendments are known as the Hazardous Material Transportation Uniform Safety Act (HMTUSA). Together, the HMTA and the HMTUSA form the Federal hazardous materials transportation laws.

TRAINING REQUIREMENTS

Each employee involved in handling hazardous materials for transportation must be trained in accordance with 49 CFR 172.700-704 to ensure proper loading, unloading, handling, storing, and transporting hazardous materials. Training must include general awareness, safety training, and be function specific. Initial training must be conducted followed by periodic updates. Contact DOT at 1-800-467-4922 for free training materials.

The federal hazardous materials transportation laws are administered and enforced by DOT with the support of state transportation agencies. HMTA/HMTUSA contain requirements to identify, package, mark, label, and placard a shipment of hazardous materials. HMTA/HMTUSA also contain requirements for manifests (a type of shipping paper - see below), emergency responses to spills, and reporting transportation incidents.

Other regulations for shipping hazardous materials.

The Resource Conservation and Recovery Act (RCRA), which deals with hazardous waste (see Chapter 2), contains requirements (in addition to HMTA/HMTUSA) specifically for shipping and transporting hazardous waste. Finally, the Toxic Substances Control Act (TSCA) contains some requirements for the transportation of polychlorinated biphenyls (PCBs).

4.2 HOW DO I COMPLY WITH THE REQUIREMENTS FOR SHIPPING HAZARDOUS MATERIALS

The regulations contain requirements for manifesting, packaging, marking, labeling, and placarding shipments of hazardous materials. The specifics of these requirements vary depending on the type and quantity of material in the shipment. Manifests are discussed in Section 4.2.1, and completion of the manifest is discussed in Section 4.2.3.

The key to identifying all appropriate requirements for a shipment of hazardous material depends on the accurate determination of the proper shipping description for that material. Determining the proper shipping description is essential because it is required for completing the manifest,

and to determine the type of shipping container, and the marking and labeling requirements for that container. These requirements are discussed in Section 4.4. Establishing the shipping description for hazardous materials is discussed in Section 4.2.2. The process can be complex and lengthy, however, once the proper shipping description is determined, identifying the packaging, marking, and labeling requirements becomes fairly easy.

4.2.1 Manifests

One requirement for most shipments of hazardous materials is the completion of a manifest (also known as shipping papers). The regulations indicate when a manifest is not required for shipping your hazardous materials.

What is a manifest?

A manifest is a multicopy form that serves as the official document used to identify and track the shipment being transported. Each copy goes to a different entity (the shipper, the transporter, and the treatment/disposal facility) involved in a shipment of hazardous material (see below).

It is the responsibility of the shipper to properly prepare the manifest. You are required to properly describe each type of hazardous material you intend to ship and the quantity, and include this information on your manifest. Sections 4.2.2 and 4.2.3 provide you with the information you need to describe your hazardous materials, and to complete the manifest. RCRA requires that a specific type of manifest, called a Uniform Hazardous Waste Manifest (EPA form 8700-22), be used for shipments of hazardous waste.

You can obtain blank copies of manifests from several sources. To determine the best source to obtain the form, use this system:

How to obtain blank copies of manifests.

- If the state to which you are shipping your material to has its own manifest, you must use that manifest form (your transporter should know which manifest form is required). Contact the hazardous waste management agency of that state, your transporter, or the waste treatment/disposal facility to obtain manifest forms.
- If the state to which you are shipping your material does not have its own manifest, use the manifest of the state in which your material was generated. Contact your transporter or your state hazardous waste agency for blank forms.
- If neither state requires a state-specific manifest, you may use the “general” Uniform Hazardous Waste Manifest (EPA Form 8700-22).

Copies are available from some transporters and treatment/disposal facilities, or they may be purchased from some commercial printers.

Manifests require a signature to certify that the shipper has personally confirmed that:

- The manifest is complete and accurately describes the shipment (i.e., shipping description is correct)
- The shipment is ready for transport (i.e., appropriately packaged, marked, and labeled)
- You have reduced the amount and hazardous nature of your material to the greatest extent possible (within your budget constraints).

Be sure you receive your signed copy of the manifest from the facility taking your material.

When the shipment is received by the transporter, the transporter must provide you with a signed copy of the manifest. Keep this copy as proof that the hazardous material was shipped from your facility, and as a record of the facility that was to receive your material. When the shipment reaches its final destination, the treatment/disposal facility must sign the manifest, provide a signed copy to the transporter, and send a signed copy to your cooperative to confirm receipt. It is important that the treatment/disposal facility provide you with your signed copy as proof that the shipment made it to the final destination. If you do not receive a signed copy of the manifest from the destination facility within a specified period of time (35 days for a large quantity hazardous waste generator; 60 days for a small quantity hazardous waste generator), you may need to file an exception report with EPA and state environmental agencies. (This is a situation you may never encounter. If you do, please contact EPA and your state environmental agency for further information.) The signed copy of the manifest must be kept on file for 3 years.

4.2.2 How Do I Determine the Proper Shipping Description?

Determining the proper shipping description of a hazardous material for shipping and transportation involves identifying several attributes of the hazardous material. These attributes depend on the physical/chemical characteristics of the material. Once you determined the shipping description for a specific material, it will always be the same unless the material or regulation changes.

The necessary information for determining the shipping description should be readily available from the product's Material Safety Data Sheet



(MSDS)(or from a waste profile sheet if required by the hazardous waste management facility). The proper shipping description consists of the following elements:

Proper
shipping
description
elements.

- Proper shipping name
- Hazard class
- UN/NA identification number
- Packing group, if required.

The following sections describe how each of these elements can be determined.

Proper Shipping Name

The
Hazardous
Materials
Table

There is a unique feature of the hazardous materials transportation regulations known as the Hazardous Materials Table (HMT). The Hazardous Materials Table (HMT) lists those materials and classes of materials designated as hazardous under HMTA/HMTUSA. It can be found in 49 CFR 172.101. The HMT provides all the elements of a proper shipping description listed above for many materials. Table 4-1 depicts sample entries of the HMT for flammable liquids, PCBs and toluene.

How to read
HMT.

Column 2 of the HMT lists the authorized, proper shipping name in alphabetical order. In selecting a proper shipping name to describe a material, the name in the column that most accurately identifies the material is the name to be used.

Use
hierarchy to
determine
shipping
name for
mixture of
materials.

For example, if the material to be shipped is composed only of toluene, the proper shipping name would be "Toluene." However, if the material is a mixture of toluene and benzene, there is no listing in column 2 of the HMT for toluene/benzene mixture. Therefore, the selection of the proper shipping name must follow the hierarchical approach outlined below, which decreases in specificity (1 is the most specific, 5 is the least specific). Remember, the most specific, accurate name must be used.



Table 4-1. Partial example HMT Entry for Flammable Liquids, PCBs and Toluene

(1) Symbol	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard Class or Division	(4) Identification Numbers	(5) Packing Group	(6) Labels Required	(7) Special Provisions	(8) Packaging (§173.333)			(9) Quantity Limitations		(10) Vessel Stowage	
							Except-ions (8A)	Nonbulk packaging (8B)	Bulk packaging (8C)	Passenger aircraft /rail (9A)	Cargo aircraft only (9B)	Location (10A)	Other (10B)
	Flammable liquids, n.o.s.	3	UN1993	I II III	3 (Flammable liquid)	T42 T8, T31 B1, B52, T7, T30	150	201 202 203	243 242 242	1L 5L 60L	30L 60L 220L	E B A	
A W	Polychlorinated biphenyl (PCB)	9	UN2315	II	9 (Miscellaneous)	9, 81	155	202	241	100L	220L	A	34
	Toluene	3	UN1294	II	3 (Flammable liquid)	T1	150	202	242	5L	60L	B	

Explanation of Columns

Column 1 = Notes whether special regulations apply to the material, including:

+ = the designated proper shipping name and hazard class listed in the HMT must be used.

A or W = subject to regulation only when transported by air (A) or water (W).

D = the proper shipping name as shown is acceptable only for domestic shipments.

I = the proper shipping name as shown is acceptable only for international shipments.

Column 2 = Lists the proper shipping name of the hazardous material.

Column 3 = Depicts the numerical hazard class or division number of the entry that must be included on the proper shipping name.

Column 4 = Depicts the hazard identification number of the entry that must be shown on the shipping page exterior of the packages.

Column 5 = Depicts the packing group assigned to the entry. Note that for Flammable Liquids n.o.s., three different packing groups are listed, and associated requirements for each packing group are provided in subsequent columns

Column 6 = Depicts label(s) required for packaging.

Column 7 = Lists any special conditions applicable to the entry

Column 8 = Specifies applicable sections for exceptions (8A), nonbulk packaging requirements (8B), and bulk packaging requirements (8C).

Column 9 = Specifies maximum quantities that may be offered for transportation by passenger-carrying aircraft or rail car (9A) or by cargo aircraft only.

Column 10 = Vessel stowage requirements

1. Listing by the material's specific chemical name (e.g., toluene).
2. Listing by the chemical family name (n.o.s.)¹ (e.g., alcohol, n.o.s.).
3. Generic listing by the material's end-use description (e.g., compounds, cleaning liquid).
4. Generic listing by the n.o.s. end-use description (e.g., insecticide, liquid, n.o.s.).
5. Generic listing by n.o.s. hazard class description (e.g., flammable liquid, n.o.s.). Hazard class determination is discussed below.

How to follow hierarchical approach to choosing proper shipping name.

HMTA/HMTUSA requires that there be only one proper shipping name per entry.

Because toluene and benzene are each a proper shipping name, they may not be used together. In reviewing the above hierarchy, the only appropriate description for the toluene/benzene mixture is number 5, generic listing by n.o.s. hazard class description. According to the HMT, both toluene and benzene have a designated hazard class of flammable liquid, which makes that the correct choice for this example of a mixture of toluene and benzene. Furthermore, HMTA/HMTUSA requires that for mixtures of hazardous materials that have a generic n.o.s. designation, the technical names of at least two components that contribute most to the hazards of the mixture be listed. In this example, both toluene and benzene, which are the technical names for these materials, are listed in parentheses. For hazardous waste, the waste code (e.g., D001, see Section 3.1.3) may be used to identify the substance. Therefore, the proper shipping name is:

USEFUL NOTE

Only those names listed in Roman type (non italics) are authorized shipping names, where as the *italicized* names are to be used primarily as finding aids and cannot be used as the shipping name.

Flammable liquid, n.o.s. (Toluene and Benzene)

¹ n.o.s. means "not otherwise specified."

Hazard Class

Under HMTA/HMTUSA, materials are defined as hazardous because of their potential danger to public health during transportation. The hazards are categorized into nine classes listed below:

There are nine hazard classes.

- Class 1 Explosives
- Class 2 Gases
- Class 3 Flammable and Combustible Liquids
- Class 4 Flammable Solids and Spontaneously Combustible Materials
- Class 5 Oxidizers and Organic Peroxides
- Class 6 Poisonous and Infectious Materials
- Class 7 Radioactive Materials
- Class 8 Corrosives
- Class 9 Miscellaneous

For most materials, the hazard class is listed in Column 3 of the HMT. For toluene, the HMT specifies that the hazard class is Class 3 – Flammable Liquid. For PCB, the hazard class is Class 9 – Miscellaneous. The above list is useful if the material you want to ship is not specifically listed in the HMT. The MSDSs should provide you with enough information to determine the class of the material if it is not listed on the HMT. It should be noted that these hazard classes are not listed in order of the relative hazard they pose.

Determining hazard class for mixtures.

The situation becomes more difficult if the material to be shipped is a mixture of two or more hazardous materials. Previously, a mixture of two hazardous materials, toluene and benzene (which happen to have the same hazard class), was discussed. But what if the hazard classes are different? For example, what is the hazard class of a mixture of toluene and liquid methyl parathion (a pesticide, which has a designated hazard class of Class 6 – Poisonous and Infectious Materials)? DOT has established a protocol for shipments containing more than one hazard. This protocol is based on a hazard hierarchy (discussed in 49 CFR 173.2a) because some hazard classes present a more significant hazard during transportation. Concerning our example above, because the hierarchy in 49 CFR 173.2a deems a poison to be more hazardous than flammable liquids, the hazard class would be Class 6 – Poisonous and Infectious Materials (Division 6.1), as well as the proper shipping name. And, as discussed previously, the technical names of each of these materials—methyl parathion and toluene—would appear in parentheses after the proper shipping name.

Identification Number

Column 4 of
HMT
provides
I.D.
number.

Each hazardous material to be shipped must have an identification number. This number must appear on the manifest and packaging. Identification numbers can be found in Column 4 of the HMT (see Table 4-1), and can be determined based on the proper shipping name. For PCB and toluene, the HMT specifies that the identification numbers are UN2315 and UN1294, respectively. For the toluene/benzene mixture, the proper shipping name of this material is Flammable Liquid n.o.s., and the identification number is UN1993 (since that is the identification number listed in the HMT for “flammable liquids”).

Packing Group

To determine the appropriate packing group, Column 5 of the HMT is consulted. In Column 5, the appropriate packing group (I, II, or III) is specified for each entry. The packing group corresponds to the degree of danger posed by the material for shipping purposes. Packing Group I presents the greatest danger, Packing Group II presents a medium danger, and Packing Group III presents the least danger. For both PCB and toluene, the HMT specifies that the Packing Group is II. For mixtures of hazardous materials, the packing group for the more dangerous material in the mixture is the one to select. In the example of toluene and methyl parathion mixture, the packing group would be II because both have that packing group on the HMT.

4.2.3 How Do I Prepare My Hazardous Material Shipment?

After determining the proper shipping description and obtaining the manifest, there are specific requirements that must be addressed before a shipment may be offered for transportation. These are:

- **Completing the manifest**—You must provide the proper shipping description for the hazardous material in the shipment, as well as information on your cooperative (i.e., the shipper), the transporter, and the designated facility to receive the shipment;
- **Packaging**—The proper package (e.g., drum) for the contents must be selected and obtained;
- **Marking**—The package must be marked properly;
- **Labeling**—The package must be labeled properly; and

- **Placarding**—The proper placard must be obtained and presented to the transporter.

How Do I Complete My Manifest?

As discussed in Section 4.2.2, the proper shipping description of the hazardous material must use the following sequence:

**Proper Shipping Name–Hazard Class–Identification Number–
Packing Group**

For our example:

Toluene, 3, UN1294, II

The proper shipping description must appear on the manifest. In addition, the following information also must be completed on the manifest for hazardous material:

Additional
information
required on
manifest.

- Shipper's EPA identification number (unless the shipper is a conditionally exempt small quantity generator (see Chapter 3 for more information on generators);
- Shipper's name and mailing address;
- Unique manifest document number;
- Transporter's company name and EPA identification number;
- Designated receiving facility's name, address, and EPA identification number;

USEFUL TIP

Transporters, recyclers, and waste treatment/disposal facilities may require additional information. Check with them before you prepare your hazardous material shipment. States may also have additional requirements that must be followed. Your hazardous waste hauler or disposal firm often is your best source for packing and shipping information, or call DOT's Hazardous Materials Information Hotline at 1-800-467-4922. If you are shipping waste, you can also call the RCRA hotline).

- Weight of each material type and number and type of containers;
- Special handling instructions;
- Certification by the generator for waste minimization unless the generator is a conditionally exempt small quantity generator;
- Signatures by the appropriate parties; and
- Emergency response information (see Section 4.2.4).

If you have more than 4 separate packages of different hazardous materials, you must attach continuation sheets onto your manifest.

How Do I Package My Hazardous Materials for Shipment

As with most other transportation requirements, the selection of the proper packaging depends on the selection of the proper shipping name. For PCB and toluene, the HMT specifies that the packing group is II. (This was found in Column 5 of the HMT.)

USEFUL TIP

Contact the hazardous material management facility where you are shipping your material to determine what type of containers they require. Some facilities use specific containers depending on how they treat or dispose of the material.

Selecting a container.

Note: PCB transformers, bushings, and capacitors are their own containers.

This means that when a container is purchased to store or transport PCB or toluene, the DOT-required manufacturer's mark must specify that it is appropriate for Packing Group II, which is designated as a "Y" (this will appear on the top or bottom of the package). In addition to the Packing Group, you will also need to select a container appropriate for the quantity and physical nature of the material and where it is being shipped. For example, if the material is a waste, the permitted hazardous material management facility may require specific packaging because of the management method. Containers are available from many vendors, transporters, or management facilities.

How Do I Mark My Containers?

It is the responsibility of the shipper to properly mark each package of hazardous materials for transportation. Marking means placing on the outside of a shipping container one or more of the following: the shipping description, instructions, cautions, and/or weight. Shipping description is discussed in Section 4.2.2. Each container of 110 gallons or less of hazardous materials must be marked with package markings that contain instructions or cautions applicable to the material the package contains. Examples of possible instructions or cautions for packages of hazardous materials to be shipped are shown on Figure 4-1.

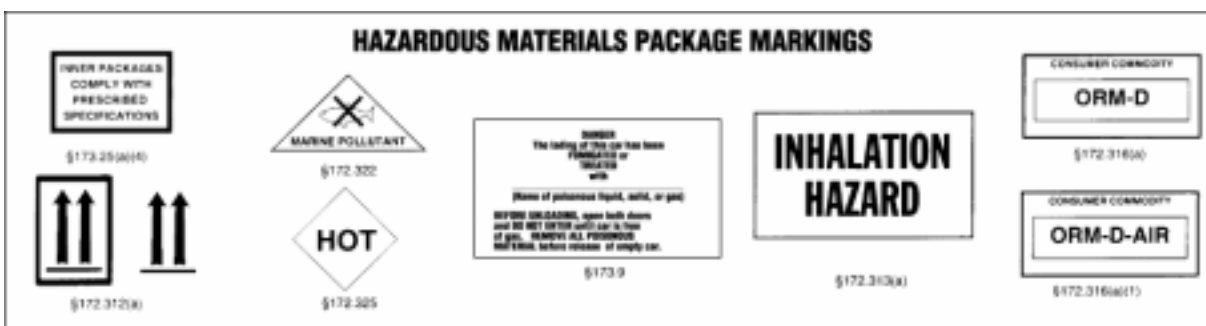


Figure 4-1. Example Hazardous Materials Package Markings

Special Marking Requirements for Hazardous Substances

Hazardous materials that meet the definition of hazardous substances require special notation within the shipping description on the manifest and on the container. For a material to be designated as a hazardous substance under HMTA/HMTUSA, the following criteria must be met:

How to determine if your material is a hazardous substance.

- It is listed as a hazardous substance in Appendix A to 49 CFR 172.101, and
- The quantity, in one package, equals or exceeds the designated reportable quantity (RQ) listed in Appendix A to 49 CFR 172.101 for each different substance in that package.

For example, toluene is listed as a hazardous substance in Appendix A to 49 CFR 172.101, and the designated RQ is 10,000 pounds. Therefore, 10,000 lbs of toluene would have to be in a single container for that particular container of toluene to be designated a hazardous substance, which is very unlikely for cooperatives. However, other materials have a much lower RQ. Benzene, for example, has an RQ of 10 pounds, and PCBs have an RQ of only one pound. Thus, if any container of benzene/toluene mixture contained more than 10 pounds of benzene, or if one



pound or more of PCBs is in any package, these particular packages would be classified as hazardous substances.

Materials that are hazardous substances must have the letters “RQ” placed in the front of the shipping description on the manifest and on the container. For example, if one or more pounds of PCBs are in a package, the proper shipping description is:

RQ polychlorinated biphenyls, 9, UN2315, II

Special Marking Requirements for Hazardous Waste

You must use a hazardous waste label when shipping hazardous waste.

If the material to be shipped is a hazardous waste, the word “Waste” must be placed in front of the proper shipping name marked on containers and the manifest. If a shipper uses a hazardous waste label as shown in Figure 4-2, the shipping description on the container does not have to include the word “waste.”

<div><h1>HAZARDOUS WASTE</h1><p>Federal law prohibits improper disposal. If found, contact police or public safety authority or the U.S. Environmental Protection Agency.</p><p>Generator's Name and Address:</p><p>_____</p><p>_____</p><p>_____</p><p>Manifest Document Number:</p><p>_____</p><p>_____</p></div>

Figure 4-2. Example of Hazardous Waste Label

Shipping descriptions for waste PCB and toluene, would be:



Waste Toluene, 3, UN1294, II

Waste PCB, 9, UN2315, II

Labeling

You may be required to use multiple labels.

The labeling of packages of hazardous materials is the responsibility of the shipper. Packaging labels, color-coded and diamond-shaped, provide symbolic representations of the hazards associated with the contents. The required labels, which are shown in Figure 4-3 (not pictured here, go to Internet site: hazmat.dot.gov), are listed in Column 6 of the HMT. The label should be affixed to the package near the marking (the proper shipping description). Because it is not unusual for hazardous materials and waste to be a mixture of numerous hazardous components, these components may have different hazard classes. Thus, for each component of a mixture, if the HMT requires a label for the hazard class of that component, the label for that hazard class must be placed on the container. Column 6 of the HMT also prescribes cases where multiple labels are required for an individual listing. Multiple labels must be located next to each other.

Placards

You must provide placards, for your transporter, unless the transporter already has them.

Placards are large, diamond-shaped color-coded signs that are placed on the outside of transport vehicles indicating the hazards of the cargo. All motor vehicles, rail cars, and freight containers carrying hazardous material in any hazard class identified in

Figure 4-4 (not picture here, go to Internet site: hazmat.dot.gov), or any hazardous waste weighing more than 1,000 pounds in hazard classes identified in Figure 4-4, must display the specified placard shown for that class or weight. Placards are a joint responsibility between the shipper and transporter. Shippers must provide the placards and the transporter is responsible for affixing the placards to the vehicle. (Many transporters already have the appropriate placards; it is recommended that shippers check transporters' needs ahead of time.)

PCB TRANSPORTATION TIP

For transport vehicles carrying one or more PCB transformers or 99.4 lbs of PCB liquid with a concentration of 50 p.m. or greater, the transport vehicle must have a special PCB label as shown in Figure 2-1 (see Chapter 2).

4.2.4 Emergency Response Information

Each shipment of hazardous material must have seven specific pieces of emergency response communication information. The information is usually carried by the transporter in the form of a DOT Guidebook called the *North American Emergency Response Guidebook* (Carrie 1996). A MSDS may also be used, provided that the following seven specific pieces of emergency response information are included:

- Proper shipping description (described in Section 4.2.2)
- Immediate hazards to health
- Fire and explosion risks
- Immediate precautions to be taken
- Immediate methods to be taken for handling fires
- Initial methods for handling spills or leaks
- Preliminary first-aid measures.

This information is also required to be placed at loading docks and where materials are stored incidental to transportation. Although it is the responsibility of the shipper to prepare the emergency response information, it is the responsibility of the transporter to ensure that this information accompanies the shipment. Shippers are also required to provide an emergency response telephone number on the manifest. This information must be displayed as EMERGENCY CONTACT:

(xxx) xxx-xxxx. The telephone number may be the number of any person or organization capable of, and accepting responsibility for, providing emergency response and accident information during time of transportation. It can be an employee, designee of the shipper, or a private company offering this service for shippers. One such organization, Chemtrec (operated by the Chemical Manufacturers Association), offers this 24-hour service for a fee. For further information contact 1-800-262-8200.

4.3 RESOURCES

4.3.1 Bibliography

Carrie, J.V. 1996. *North American Driver's Guide to Hazardous Materials*. Prepared for American Trucking Association.

U.S. Department of Transportation. *Hazardous Materials Transportation Training Modules: Compliance and Enforcement*. (CD-ROM) U.S. Department of Transportation, Research and Special Programs Administration. OHMIT-DHM-50

U.S. Department of Transportation. February 1994. *DOT Chart 10, Hazardous Materials Marking, Labeling and Placarding Guide*. U.S. Department of Transportation, Research and Special Programs Administration. OHMIT/DHM-51

American Trucking Association. *Hazardous Waste Regulations, A Handbook for the Trucking Industry*. (This is a very useful reference for shippers of hazardous materials, as well.)

American Trucking Association. *Driver's Guide to Hazardous Materials*.

4.3.2 For Further Information

Internet Sites

<http://hazmat.dot.gov> – Home page for Office of Hazardous Materials Safety.

<http://www.trucking.org> – American Trucking Association Home page.

E-Mail

Training@rspa.dot.gov – To obtain a copy of the Department of Transportation Training Modules.

Hotlines

DOT Hazardous Materials Info Line	1-800-467-4922
EPA RCRA Hotline	1-800-424-9346

4.3.3 Regulatory Resources

Please see Chapter 1 for a list of U.S. EPA Regional Offices and State Hazardous Waste Agencies.

4.3.4 Compliance Checklist

The following is a brief, concise compliance checklist that will help you comply with the transportation regulations.

Proper Shipping Description

Are the physical and chemical characteristics of the material accurately identified?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has the proper shipping name been selected?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has the hazard class or division been identified?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has the UN or NA identification number been identified?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has the packing group been determined?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Does the material meet the definition of a hazardous substance?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If so, have the special provisions been met?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the material defined as polychlorinated biphenyls?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If so, have the special provisions been met?	Yes <input type="checkbox"/> No <input type="checkbox"/>

Packaging

Has the proper packaging been obtained?	Yes <input type="checkbox"/> No <input type="checkbox"/>
---	--

Marking

Is the package adequately marked with proper shipping name?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the package adequately marked with proper address?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the package adequately marked with proper identification number?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the material in the package a hazardous substance?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If yes, is the package adequately marked with proper RQ?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the package adequately marked with proper orientation arrows?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the package adequately marked with proper hazardous material designation?	Yes <input type="checkbox"/> No <input type="checkbox"/>

Labeling

Has the proper label(s) been identified and affixed?	Yes <input type="checkbox"/> No <input type="checkbox"/>
--	--

Manifest

If the shipment is hazardous waste, has a uniform hazardous waste manifest been obtained?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Are there enough copies for all entities involved in the shipment?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is a continuation sheet necessary (i.e., more than four materials being shipped)?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has a unique manifest document number been listed?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has each material's proper shipping description (name, hazard class, identification number, packing group) been noted on the manifest?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If the shipment is waste, has the word "Waste" been included as part of the proper shipping description?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Does the material meet the definition of a hazardous substance?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If so, has the designation "RQ" been added?	Yes <input type="checkbox"/> No <input type="checkbox"/>

- | | |
|--|--|
| Has the total quantity and container type been listed for each material? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Are any additional descriptions required for the particular material? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has the EPA ID for the shipper, each transporter, and the designated facility been listed? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Have the names and addresses of the shipper and designated facility been listed? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has the emergency response information been included? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has the manifest been signed and dated by hand? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has a copy of the manifest been maintained for recordkeeping? | Yes <input type="checkbox"/> No <input type="checkbox"/> |

Placarding

- | | |
|--|--|
| Have the proper placards been obtained and made available for the transporter? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
|--|--|

Shipment Preparation

- | | |
|---|--|
| Has the shipment been properly identified, packaged, marked, and labeled? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has the shipment been packaged such that it is not leaking? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Have the proper placards been affixed to the vehicle? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Do the number of containers match the number listed on the manifest? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Are potentially incompatible materials separated from each other? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Is the shipment properly secured, blocked, and braced? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Is the emergency response information readily available? | Yes <input type="checkbox"/> No <input type="checkbox"/> |

Spills/Incidents

- | | |
|---|--|
| If a spill of a material above its quantity has occurred, has the National Response Center been notified (see Chapter 7)? | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Has a DOT incident report been filed? | Yes <input type="checkbox"/> No <input type="checkbox"/> |